

Carbon footprint initiative in Uganda

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Abstract

Purpose Substantial evidence from numerous studies indicate that Uganda is already experiencing the negative impacts attributed to climate change, manifested by changing and unpredictable weather patterns, with implications to food production, water, and livelihood. Therefore, reducing carbon footprints is a key ingredient in mitigating climate change. However, this requires availability of adequate knowledge and human resource capacities to analyze and manage the carbon dynamics as well as energy-related aspects at all levels of organizations. It is against this background that training activities were designed to equip participants with knowledge and skills on the subject of carbon footprints.

Results Participants were exposed to current techniques and methods of estimating and reducing carbon footprints; and

equipped with knowledge on pathways for realizing carbon neutral resilient systems. In addition, participants formed a carbon footprint network with a view of sharing experience with other actors elsewhere in this field, and periodically organize similar trainings and other avenues for experience and knowledge sharing.

Keywords Carbon footprint · Climate change · Greenhouse gases · Uganda

1 Introduction

Uganda's ecological and human systems are highly vulnerable to the negative impacts of climate change especially due to its low level of economic development and adaptive capacity (IPCC 2007). The major likely impact is alteration of the functioning of ecological systems and subsequently affects their capabilities and capacities to deliver services and products. Substantial evidence from numerous studies indicate that Uganda is already experiencing the negative impacts attributed to climate change, manifested by changing and unpredictable weather patterns, with implications to food production, water, and livelihood (Kimbowa 2010).

Reducing carbon footprints is a key ingredient in mitigating climate change. However, this requires availability of adequate human resource capacities to analyze and manage the carbon dynamics as well as energy related aspects at all levels of organizations. The government of Uganda is committed to mitigating climate change and has in response developed the National Adaptation Plan of Action, a framework for identifying appropriate mitigation and adaptation options (Uganda NAPA 2007).

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Uganda is one of the East African Community countries currently participating in the development of an international standard on carbon footprint of product with the sponsorship of the Swedish International Development Cooperation Agency through the project coordination by Swedish Standards Institute. It is envisaged that Uganda is likely to significantly benefit from the opportunities associated with active participation in the development and implementation of increasing climate related standards. However, such benefits will greatly depend on human resource capacities that understand life cycle thinking and the carbon dynamics so as to facilitate pathways to a carbon neutral status at various levels.

Life cycle thinking is about getting reliable information about environmental, social, and economic impacts into people's hands at the time they are making decisions (UNEP/SETAC Life Cycle Initiative 2012), and carbon footprint is viewed as a life cycle-based indicator and that supports the development of life cycle thinking in Uganda. Whether carbon footprint is real or just perceived or just desired seems not so important, there is enough momentum for numerous international, national, and sectoral initiatives underway to deal with it (Finkbeiner 2009)

It is against the above background that training activities were designed to equip participants with knowledge and skills on the subject of carbon footprint. The objectives of the training were to: create a body of experts capable of influencing policy on emission challenges based on scientific analysis; expose participants to current techniques and methods of estimating and reducing carbon footprints; and equip participants with knowledge on pathways for realizing carbon neutral resilient systems.

The training took place from 30 May to 3 June, 2011 at Makerere University in Kampala and drew participants from industries, private sector, government, academia, and civil society organizations among others. It was facilitated by experts from Makerere University, University of Dar es Salaam, University of Nairobi, and the Uganda National Bureau of Standards (UNBS). The training involved sharing of experiences and equipped participants with knowledge to better understand the carbon footprint concept and assessment as well as designing of appropriate measures for reducing emission of greenhouse gases and effecting changes in lifestyles. The discussed topics included: clean development mechanism; municipal council composting projects; pathways to low carbon resilient systems; Uganda's experience with the development of an international standard on carbon footprint of products; carbon cycle, carbon emissions, and climate change; approaches for carbon footprint reduction;

integrated watershed management and carbon dynamics, carbon footprint concept and assessment, among others.

2 Way forward

At the end of the training, the participants discussed the need for creation of a platform to discuss carbon footprint activities in Uganda. They agreed to form a carbon footprint network with a view of sharing experience with other actors elsewhere in this field, and periodically organize similar trainings and other avenues for experience and knowledge sharing. They also observed the need to introduce training programs related to carbon footprint into the university curriculum.

3 Future plans

Having established a carbon footprint network, which is currently coordinated by UNBS and Makerere University, we intend to use this network to;

- Create more awareness (to grass root level) on carbon footprint work.
- Organize periodic national/regional trainings at different policy and operational levels. A follow up training is tentatively scheduled for October 2012.
- Build and harness technical capacity on life cycle assessment and product category rules (PCR) development.
- Address research gaps and data collection challenges especially through working with the academia.
- Explore the possibility of developing a regional PCR and database.
- Explore interlinkages with international life cycle related networks such as UNEP/SETAC Life Cycle Initiative.
- Create a website for the network

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